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An Essay
on the
Non Existence of a Syphilitic Virus
for the Degree of
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in the
University of Pennsylvania

by
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of
Pennsylvania

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On the
Non Existence of a Syphilitic Virus

As is well known it was about the end of the fifteenth century, that Europe was invaded by a disease, which on all sides as we are told, spread alarm, horror, and death, and of which it is said the present Syphilis is a modification.

The writers by whom this disease was first described were far from considering it a new affection; on the contrary they looked upon it as a disease known to the Ancients, but having assumed an epidemical character, influenced by the atmosphere &c became a general plague, which, after having raged for several years with great fury, gradually disappeared, leaving behind phenomena analogous to those described by antiquity.

It was at this period, Ignorance, as writer has termed it, the "Mother of Credulity" forced every mind

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to yield to her sway: the disease was therefore attributed to the influence of the constellations, and the conjuncture of the planets - The cause was afterwards according to the Galenic doctrine, thought to consist in a certain morbid constitution of the humours, which, originating in the liver, propagated itself to the genital organs - The alimentary substances were also accused, after this, the state of the atmosphere, and the inclemencies of the seasons - Finally, the theories of the times upon the nature and qualities of the periodical discharges of women, led to the admission of a Specific Virus, which, produces all those affections denominated Syphilis, and we find that it was not until the admission of this virus, that the disease termed Venereal attracted much attention, not because it was not known, but, because it was not yet thought to arise from a cause susceptible of infinite variation in form, character, and intensity in its effects -

As at present we are told the Venereal affection has always produced a total wasting and weakness of the

powers of the system, from which arose a number of cachetic affections, so that when the Venereal Virus was discovered it was not long ere the diseases the necessary consequence of a state of feblenes and irritation were attributed to its presence –

By the advocates of this virus, contagion is looked upon as a proof of its existence – To this, those of the opposite opinion are far from assenting, and to support their views, they bring forward as the cause the change in the secretions by inflammation, which renders them so acrid as to produce irritation and inflammation of the same nature as the original in the part to which they are applied – As examples to this effect Coryza Dysentery &c have been given –

In the first we are told an excoriation of the upper lip frequently takes place, and in some cases is covered by a scab and according to Des Bois and other highly respectable authors, the mucous secreted in these cases will cause the same irritation to be developed in persons

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who experience its contact be it by embracing or by using the same Handkerchief - This he says he has frequently witnessed, and he mentions one case in particular, where the wife of his friend became similarly affected by embracing her husband whilst labouring under coryza.

Is it here necessary asks Des Bruis to have recourse to a virus to explain this contagion? He answers certainly not - Because we can easily conceive, that when the secretory organs are affected their secretions become altered and by their acrid qualities they are enabled to cause an irritation in the part to which they are applied - Why then he asks should it be otherwise with that irritation termed Venereal?

By recurring to the alle explanation offered by Dr Harris, and to which Des Bruis and others lend their support, we can readily perceive, how the venereal disease can be propagated without the admission of any specific virus - The following are his words - "Women who yield to an immoderate indulgence in venereal pleasures who

have daily connexion with a number of men suffer laceration, excoriation, and consequent inflammation, and from a want of rest, and cleanliness, ulceration follows, the matter secreted becomes more a less acrid and irritating, and capable of exciting inflammation and ulceration in the part to which they are applied"

To the above authorities who lend their support to this happy explanation Mr. Evans may be added, who, was present as we are informed at the examination of two hundred women of the lowest order and the most frequented by the soldiers - Among this large number of women not a case of discernable diseases was found, nevertheless the military hospitals continued to have their usual number of cases.

This we think proves conclusively, that contagion, which is thought to be one of the properties of the Venereal virus, depends merely upon the alteration of the secretions or upon the ulceration caused by inflammation, modified by the greater or less acridness of the secretion for we

find though these women were healthy before having connexion with the soldiers, from the irritation and consequent inflammation caused by repeated coitus they were enabled to communicate the disease termed Venereal to those soldiers with whom they had connexion.

As a further evidence that Contagion depends upon the acridness of the secretion, we are told by the same authors, that, from a neglect of cleanliness, the secretions around the Glans Penis become so acrid as to cause excoriation, and ulceration of this part, and, that this purely local affection will communicate itself to other individuals and cause a series of accidents of no little moment.

This opinion we find is not of modern date, for both Mahomet and Moses were aware of this neglect of cleanliness, and hence introduced circumcision as a religious ceremony, and it is thought the same views caused the Moorish women to amputate the Clitoris and Nymphæ.

We also find this Contagious influence, to be in some measure regulated by the susceptibility of the indi-

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vidual, as well as the acridness of the secretion. As illustrating this opinion the following example is given by Des Brus. Six periods after a frugal repast had successively connexion with the same women, from whom all contracted the venereal disease. It appeared as we shall find in different forms proportioned to the susceptibility of the individual. Two of them had Chancres and Bubos, two Gonorrhea, the fifth a Chancre, and the sixth a Bubo.

It may here be asked if these phenomena can be explained by a specific virus? How can we by this virus account for the mildness of the disease in one case and its severity in others. But on the other hand a satisfactory explanation can be given by having recourse to the excitability of the individual modified by the intensity of the inflammation: for, if instead of coition, these phenomena had been produced by other irritants as Vegetable acids &c would they not have been explained upon these principles? Would not they be accounted for in this way? The irritation operating upon the extremity of the Urethra, it inflamed, and

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as common to the mucous surface its secretions were more or less increased and altered, and thus established a disease termed Gonorrhea.

In two others the glans being the most sensible inflammation took place, ulceration followed, which is called Chancre, and from the irritability of the individual the irritation extended itself to the Inguinal Glands, where it occasioned an engorgement termed Bubo.

If then phenomena produced by caustic or other irritants can be accounted for in this way, why should we resort to an other explanation to account for the irritation and ulceration produced by coition? could not this irritation extend and produce Buboes?

To show that contagion is modified by the intensity of the inflammation we have but to recur to Gonorrhea and here we find a striking example. This disease during an intense or lively inflammation readily propagates itself by coition as is daily witnessed, but when it assumes the form termed Gleet this power

is lost, but, were the propagation of this disease dependent on a Specific Virus, it ought also in this form to be contagious, for that, as Dr Gibson has happily expressed it, is but a "Chronic Gonorrhea" and as such, ought to possess the power of communicating itself. But this, by most writers we are told is not the case, and they look upon it as a mild fluid destitute of Virus, and proceeding from relaxation and debility of the lining membrane of the Urethra, which, we are told is apt to succeed all inflammations of the mucous membranes.

Having now endeavoured to prove that the disease denominated Venereal can propagate itself without the existence of a Specific Virus, it is now proposed to consider that form termed Secondary Syphilis, which, by the supporters of this virus is looked upon as proving its existence, which, by its absorption produces those constitutional symptoms denominated Secondary Syphilis.

By those who advocate this opinion we are told

that this virus introduced under the article where it occasions an inflammation of greater or less intensity, will, after an indefinite lapse of time direct itself towards the internal parts, which is announced by an engorgement of the Inguinal Glands called Venereal Bubo.

To distinguish this from Bubos arising from other causes various external appearances have been given, but, these, as confessed by nearly all writers on this subject are presented by those induced by other irritants, hence they were obliged to resort to some other mode by which this affection might be distinguished, and this we find, to be the History of the patient, who, should he confess an impure coition would be said to be labouring under a Venereal Bubo.

This diagnostic by those of the opposite opinion, is thought unequal to the task, for it may be asked, if all the symptoms of a Venereal Bubo can be produced by other irritants, as wounds, or corns upon the toes, why should we resort to a specific virus to account for its ap-

pearance because it followed an impure coition? Could it not here be attributed to the excitability of the individual and the extension of irritation by sympathy as in the other cases? Does the supposition of a Virus carried into the ganglions and irritating them explain more happily the cause of its appearance? To show that this engagement is influenced by the extension of irritation which is proportioned to the degree of inflammation and the excitability of the individual we have but to appeal to the practice this theory gave rise to, and to the experiments of Mr. Bell.

Of the former we find, that entertaining the above views some Physicians thought the disease might be removed and the system protected from infection by sacrificing the diseased parts. For this purpose Des Brus tells us, some have proposed the extirpation of the seat of disease, others, the cauterization of ulcers on their first appearance. He asks what has been the result of these practices? It is answered with the greatest number of

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patients the wounds inflamed, buboes were produced, and serious results followed. But these we are told were not attributed to the irritation produced by the remedy, but that, the means had not been sufficiently active to destroy the virus, which, in their efforts to expel they caused to fix itself upon the Inguinal Glands.

This explanation we think is valuable but for its ingenuity, for it certainly does not afford a satisfactory explanation of the appearance of a Bubo. But on the contrary, by the extension of irritation, we can readily conceive that the degree of inflammation caused the remedies would rapidly involve the Inguinal Glands, as the following experiments of Mr. Bell go to prove

According to this able experimentalist we find, that out of ten cases where caustic was applied to Chancres all but two were affected with Buboes, whilst, in ten others, five of which were treated by Mercury and five with simple cerate only one suffered from a Bubo, and it occurred among those treated with Mercury.

This it is thought affords sufficient proof, that this secondary affection called Bubo, is merely the result of the extension of a local irritation, modified by the degree of inflammation and susceptibility of the individual, and not to the transport of a virus into there glands.

This theory we think is also objectionable in admitting the delay of the virus in some part of the body, for an indefinite lapse of time, for we are told, that men who are accustomed to have connexion with a women retain their health, whilst a stranger should he have connexion with her, will receive the infection. If we regard that stimulant denominated Venereal virus, to be a common irritant this fact can be readily understood, but on the contary, if it acts on the principle of a virus it cannot be so easily explained, for according to Des Bois, admitting the genital organs become accustomed to this virus, we cannot suppose the absorbents can also become accustomed to it, for if these organs could be habituated to those substances with which they are placed in contact life would not be

mentained for a long time as the lhylopoietic vessels, accustomed to the lhyle, would no longer change this nutritious liquid and all the functions would be arrested.

On the other hand if the absorbents of the penis do not become accustomed to the virus it ought always to be carried into the humours and produce a general infection.
From this we conclude the virus could not remain as we are told by the above theory for an indefinite lapse of time in some part of the body without being subjected to the absorbents for as Des Bruis has asked " comment concevoir que le virus introduit dans une partie quelconque du glaind du canal ou du corps pourrait se soustraire á l'action ie active des vaisseaux absorbans? Par quelle anomalie expliquer le séjour prolongé pendant les années entieres de ce virus dans quelque coin de l'economie pour produit inopinément une série des symptoms secondaires plus effrayans les uns que les autres-!

From these remarks we infer, it must be absorbed and it is by the absorption of this virus into the system,

that its advocates explain those affections denominated Secondary Syphilis. But these secondary symptoms which are confined chiefly to the skin and throat, by those of an opposite opinion, is thought to point out the intimate sympathy which exists between these parts and the organs of generation, and by this sympathy they explain the appearance of these secondary affections

To show how intimately the organs of generation are connected with all parts of the body, we have but to appeal to Deverge and others by whom we are told, that sensibility is distributed in different degrees in different tissues of the economy, and those tissues, which possess it in the greatest degree, receive more easily the impression of stimuli, and transmit it to others in proportion to their degree of connexion - The organs of generation he tells us, possess this power in an eminent degree, and to prove their connexion with the other parts of the body he gives us a familiar example -

He says from the venereal desire we find developed in the organs of generation, an increased sensibility, which reacts and rebounds every where, as is shown by the increased heat of the body, the sparkling eyes, the accelerated circulation, the turgified throat, the dry mouth, and in that a general commotion, which subsides upon the desire being gratified.

It is upon the above principle that we find the throat most generally first affected, and not by a routine which is said to be peculiar to this virus, and we now propose to consider the intimate sympathy which exists between the organs of generation and this part.

By Des Brus we are told that the organs of generation not only exercise a marked influence over the mucous covering of the mouth and pharynx, but over the larynx the tonsils and neighbouring parts.

To find support for this opinion we have but to recur to the change of voice at puberty, at which time, it becomes louder and stronger, whilst, in castrated persons

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it retains its delicate and feminine tone. So striking does Des Bruis think this sympathy that he asks, who has not marked the masculine voices of the women of the town? especially those as he expresses it "qui sont dans le monde depuis long temps" he continues by saying we have but to hear them and we recognize their profession.

As an other example of this intimate sympathy Des Bruis relates a case of a young man, who could not pass a night with a woman without presenting the next morning swollen tonsils and suffering from difficult deglutition.

Having now endeavoured by a few examples to show the close sympathy between the organs of generation and the throat, and by it to explain that affection of the throat termed Secondary Syphilis, we propose now to consider the sympathetic tie between the organs of generation and the skin, and by it, to account for those affections of the skin called under the head of Secondary Syphilis, and to show these affections are not always conse-

cutive to syphilitic sore throat. In support of this opinion, a number of cases are related by Des Bois, where an affection of the skin was consecutive to an irritation of the genital organs. The following was selected from those given by the above author, and will be given in his own words "on sait que lorsque des désirs vénériens sont comprimés pendant long temps, ou l'on qu'au contraire on se livre à l'onanism des boutons nombreux et rougeâtres se manifestent sur differentes parties du corps surtout au front ou autours des ailes du nez." An other which is related by the same authors is of a man, who, from the operation of phymosis suffered from copper blotches upon the skin analogous to those termed Venereal.

These cases we think illustrate sufficiently the intimate connexion existing between the genital organs and the skin, and as upon a former occasion, it is by this sympathy we explain those affections of the skin denominated Syphilitic By the last case we also find that these secondary affections do not observe any particular routine in

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their appearance, but yield, to the idiosyncracies of the individual. It is by these intimate sympathies which exist between the organs of generation and the different parts of body, bearing in mind that sensibility is distributed in different degrees in different tissues, and those which possess it in the greatest degree receive more more easily the impression of stimuli, and transmit it to others in proportion to their degree of connexion, that we account for those affections denominated Secondary Syphilis, for we find the organs of generation to possess the highest degree of sensibility, and as has been shown by Des Brus Deverge and others their connexion with various parts of the body are very close, hence, we can readily conceive that those affections termed Secondary Syphilis, will result from the transmission of the irritation by Sympathy.

These sympathies we are told by the above authors are sufficient to explain the developement of secondary syphilis and by the same we are also informed, that when an irritation has existed for a time upon the organs

of generation the different parts which sympathize with them and especially the mucous follicles, are excited and disposed to take on irritation - This disposition says Des Brus, may last for a greater or less space of time, and may be more or less evident in different individuals, and if persons placed under these circumstances expose themselves to irritating causes morbid phenomena will result: thus we observe consecutive accidents of the throat in individuals, who, a short time after their cure, give themselve up to the excesses of the table, or who, abandon themselves to too frequent coition - In the same way we see the anus of persons, who, a short time after their treatment, walk, ride too much, especially during the heat of the summer, and in persons who perspire freely between the buttocks we find pimples excoriations &c - It may here be asked, if it be more difficult to conceive the developement of these secondary affections than it is to understand the appearance of aphthae in the mouth and ulcers in the throat, which are frequently consecutive to Gastritis Phthisis &c.

In these cases we do not require a Specific virus to explain these phenomena, on the contrary, sympathy is invoked, and by it, a satisfactory explanation is thought to be given. Why then is it, we should act differently for those affections consecutive to the irritation of the genital organs? What is it that authorizes this difference? What authorizes us asks Des Brus, to attribute the morbid phenomena by which we are affected to a specific virus, besides he says, it ought to be explained how this wonderful being can remain quiet for so long a time in the system and suddenly awake, and act upon the orifices of the mucous membrane or upon the skin, for it is allowed, so acrid is this irritant, that it causes phlogosis in the part to which it is applied, yet by the advocates of a specific virus we are told it can be taken into the system where it can remain for years without producing any effect. It also remains says the same author to prove that these affections supposed to be specific present a peculiar character and differ from those affections which we know not to be specific

By the supporters of this virus it is said, that it is difficult to conceive that an ulcer of so small an extent which is indolent or disappears rapidly can cause sympathies sufficiently active, to give rise to the developement of so great a number of evils as are said to be consecutive to Syphilis.

To this Des Brus replies, that experience teaches that the consecutive phenomena are proportioned to the severity, duration and extent of the primary ulcer as is shown by the secondary symptoms being more frequent after the cauterization of ulcers than after ulcers which had not been treated in this way

To obtain support for this opinion we have but to return to the experiments of Wm Bell in which this opinion is happily illustrated, and which lend their support to the opinion that irritation modified by the idiosyncrasies of the individual is alone the cause. An other circumstance which by those who favour the opinion of a virus is thought to prove its existence, is, the appearance of exostoses caries &c five ten or fifteen years after a per-

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In answer to this, notwithstanding the high authorities by which we shall be opposed, we also argue with Des Bois, who mentains, that it is difficult to explain these phenomena by sympathy; but he says that these venereal evils have no other casual relation with the primary affection, than that which the imagination of authors have created, he says they are no more venereal than the Gastro-Enteritis Pleurisies, Rheumatisms, and other phlegmasia that we observe consecutive to chancres and he continues by saying it is as impossible to prove them of a syphilitic origin from the primary affection, as it would be to prove these last syphilitic. "Have we not asks the same author observed at all times ulcers of the throat, exostosis caries pustules of the skin &c? and he continues by saying the same causes which then produced them can without doubt at present occasion them.

In support of this opinion the same author relates numerous cases, where men suffered from tumours

of the anus ulceration of the tonsils and other affections under the head of secondary syphilis who had never had connection with women.

In this opinion Des Bres is supported by Dr Emerson, by whom much attention has been paid to this interesting subject. To go into the details of the case related by him would be more than useless, therefore we propose to view it in a general way. In it we find a widow lady from a sloughing ulcer on the heel of her right foot suffered the inconvenience of a Bubo, pains in the bridge of the Nose, and from a papular eruption on the hands and arms, which according to many respectable authors would be Syphilitic.

To the above may be added the one related by our distinguished professor of the Institutes of Medicine where Copper Blotches appeared from the inordinate use of Balsam Copaiva.

From the above cases, and from the testimony of other authors we find, that these affections termed

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Secondary Syphilis can be produced without a venereal virus and by Des Brus and others it is asked, if it be not remarkable that without coition, and consequently without a specific virus, that pustules, caries, and other secondary syphilitic affections can be created. He goes on to say if these cases were presented to the observation of a Physician who advocates the belief of a specific virus, he would instantly doubt the chastity of his patient, but he, from the strong conviction that these as he terms them "pretendus symptômes vénériens", are but the products of irritation, does not hesitate to believe his patient, and attribute them to the above cause and not to one susceptible of such infinite variation in form character and intensity in its effects, as that denominated Syphilitic Virus.

To these views of the nature of Syphilis, which are respectfully submitted to the consideration of the Faculty, I have been led by the writings and reasonings of many able members of the profession.

To have given an opinion derived from experience

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and observation at the bed side of the patient, would have been impossible in one not yet admitted to the practical duties of the profession, and who, not having entered the "Temple of Medicine", but standing on its threshold, has attentively listened to the experienced, and thus been led to the adoption of an opinion that seems rapidly extending.